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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/486,677 | 06/26/2000 | ANSGAR BEHLER | H-2938-PCT/U | 8906 |

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COGNIS CORPORATION
PATENT DEPARTMENT
300 BROOKSIDE AVENUE
AMBLER, PA 19002

EXAMINER

KEYS, ROSALYND ANN

ART UNIT PAPER NUMBER

1621

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,677

Applicant(s)

BEHLER ET AL.

Examiner

Rosalynd Keys

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,14-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,14-26 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 10, 14-26 and 30 are pending.

Claims 10, 14-26 and 30 are rejected.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on March 10, 2006 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 10, 14-26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tominaga et al. (JP 7-303825) alone or in view of Naik et al. (US 4,731,378) or Grossmann et al. (US 4,999,041).

Tominaga et al. disclose a nonionic surfactant with good fluidity at low temperatures, can easily be handled on transportation and mixing, and has an excellent cleaning performance. These nonionic surfactants are obtained by random addition of, on an average, 5-15 moles of ethylene oxide and 0.3-5.0 moles of propylene oxide to alcohol, containing at least 50-wt%, preferably at least 60% of saturated linear fatter higher alcohol with 8-18 carbon atoms (see claim 1, pages 2-4 and Table 1). An objective of the invention of Tominaga et al. is to lower the pour point of nonionic surfactant such that it is preferably 25°C or lower, even more preferably, 20°C or lower (see paragraph 0009). The reaction is conducted in the presence of a base (see example 1).

Tominaga et al. do not exemplify the claimed ranges of EO and PO. However, it is well established that consideration of a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches to a person of ordinary skill in the art. *In re Boe*, 355 F.2d 961, 148 USPQ 507 (CCPA 1966); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 279, 280 (CCPA 1976); *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 570 (CCPA 1982); *In re Kaslow*, 707 F.2d 1366, 1374, 217 USPQ 1089, 1095 (Fed. Cir. 1983). The EO and PO ranges disclosed in the specification of Tominaga et al. either touch or overlap with the claimed EO and PO ranges. In the instant application the EO value ranges from about 3 to about 5 and the PO value ranges from about 2 to about 2.5. Tominaga et al. teach using 5-15 moles of EO and 0.3 to 5 moles of PO. It has been held that in the case where claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997). Tominaga et al. teach that if the average number of added EO molecules exceeds the given range the resultant nonionic

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surfactant with be insufficient for practical use due to an unsatisfying cleaning performance.

Tominaga et al. teach that if the average number of PO added falls below 0.3 the lowering of the pour point will be insufficient and it will be problematic to handle the surfactant at low temperatures and if the average number of PO added exceeds 5 a lowering of the pour point is observed but in this case the cleaning performance will be inferior. Tominaga et al. teach that by controlling the average number of added PO and EO molecules one can achieve a lowering of the pour point. Thus, Tominaga et al. teach that controlling the average number of added PO and EO molecules is a result-effective-variable. Discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); *In re Aller*, 42 CCPA 824, 220 F.2d 454, 105 USPQ 233 (1955).

Taminaga et al. fail to add a fatty alcohol in the manner as claimed in claim 14. However, Taminaga et al. do teach that the alcohol should be an alcohol having at least 50-wt%, preferably at least 60% of saturated linear fatter higher alcohol with 8-18 carbon atoms (see paragraph 0006). Taminaga et al. also teach that lowering of the pour point can be achieved by increasing the content of higher alcohol that is used as raw material for addition of alkylene oxide (see paragraph 0009). Thus, Tominaga et al. teach that the concentration of fatty alcohol is a result-effective-variable. Discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); *In re Aller*, 42 CCPA 824, 220 F.2d 454, 105 USPQ 233 (1955).

Tominaga et al. fail to teach the use of surfactants with agrochemicals and pesticides.

Naik et al. teach the use of surfactants in a pesticide formulation (see entire disclosure, in particular column 1, line 49 to column 2, line 65).

Grossman et al. teach the use of surfactants with a herbicide (see entire document, in particular column 3, line 31 to column 4, line 36).

One having ordinary skill in the art at the time the invention was made would have found the use of the nonionic surfactants of Tominaga et al. in combination with agrochemicals and pesticides obvious, since Naik et al. and Grossmann et al. teach that the use of surfactants allow the skilled artisan to formulate the pesticides and herbicides into sprays, emulsions, solutions, etc. One having ordinary skill in the art would be motivated to make such formulations for ease of treatment of plants.

Response to Arguments

6. Applicant's arguments filed March 10, 2006 have been fully considered but they are not persuasive.

The Applicants argue that Tominaga et al. provide no teaching, suggestion or motivation (1) to select the average number of EO units present in each random fatty alcohol alkoxylate to have a value from about 3 to about 6, and (2) to select the average number of PO units present in each random fatty alcohol alkoxylate to have a value of from about 2 to about 2.5. The Examiner disagrees. The EO and PO units disclosed by Tominaga et al. touch or overlap with the claimed EO and PO units. Thus, there is a teaching to select the claimed EO and PO units. Further, the motivation to select the claimed EO and PO units would be optimization of a variable disclosed by Tominaga et al. as being a result-effective- variable. Tominaga et al. teach that by controlling the average number of added PO and EO molecules one can achieve a lowering of the pour point (see paragraph 0009).

The Applicants argue that moreover, there is no teaching, suggestion or motivation to achieve a cold cloud point below 0°C as claimed. The Examiner disagrees. In the instant

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specification the cold cloud point is related to the low temperature behavior of the random polymers. Thus, the cold cloud point of the instant specification appears to be similar to the pour point of Tominaga et al., which is taught to be preferably 25°C or lower, even more preferably, 20°C or lower (see paragraph 0009). Thus, Tominaga et al. provides a teaching to use a cold cloud point below 0°C as claimed. Tominaga et al. also further motivates one to use lower cold cloud points for improved handlability and cleaning performance (see paragraph 0009).

The Applicants argue that none of the examples of JP '825 exemplify a cold cloud point. This argument is not persuasive because as discussed above the Examiner believes the instant cold cloud point is similar to the pour point of Taminaga et al. and in examples 1-3 Taminaga et al. disclose the pour point. However, even if JP'875 failed to disclose examples the instant claims are still *prima facie* obvious because a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches to a person of ordinary skill in the art. *In re Boe*, 355 F.2d 961, 148 USPQ 507 (CCPA 1966); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 279, 280 (CCPA 1976); *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 570 (CCPA 1982); *In re Kaslow*, 707 F.2d 1366, 1374, 217 USPQ 1089, 1095 (Fed. Cir. 1983). Taminaga et al. teach the ordinary skilled artisan to obtain nonionic surfactants having good low temperature behavior and provides means for obtaining such. Thus, there is an expectation of success.

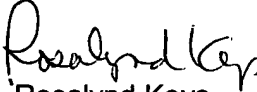
For the above reasons, the Examiner believes the instant claims are *prima facie* obvious over Tominaga et al. (JP 7-303825) alone or in view of Naik et al. (US 4,731,378) or Grossmann et al. (US 4,999,041).

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M-W & F 4-10pm; H 5:30am-5pm; Sat 8am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rosalynd Keys
Primary Examiner
Art Unit 1621

March 16, 2006